

Mid - Florida Atari Computer Club Bulletin

May, 1995

Vol. 12, No. 5

This is the monthly bulletin of the Mid-Florida Atari Computer Club. In it are articles written or submitted by members who feel they are of interest to all users of Atari computers.

You may wish to join a computer club to share the beneficial aspects of having others around you who have similar machines, like interests, and a desire to share what they know with others. A users group can help you understand things about your computer that they have already discovered.

Our membership, at \$12.00 per year, entitles you to the newsletter, access to the disk libraries, and club meetings where all the fun and education happen on a monthly basis.

We meet in the Orlando Library building downtown Orlando, 101 E Central Blvd. At 1:30PM on the second Sunday of each month. Feel free to join us there next month to learn more about the wonderful world of computers, and Atari computers in particular.

For Newsletter Exchange

M.F.A.C.C.
C/O Bob Smith
3729 Yosemite Dr.
Orlando, FL 32818

M.F.A.C.C. Affiliated BBS Listing:

Top Gun	☎ 381-5403
Starbase 1	☎ 381-2610
Inner Core	☎ 294-5183
Lear-Sparks Midi	☎ 786-0239

Prez. Message
Page 2

Minutes
Page 3

Money STuff
Page 4

FYI
Page 6

Key Issues
Page 8

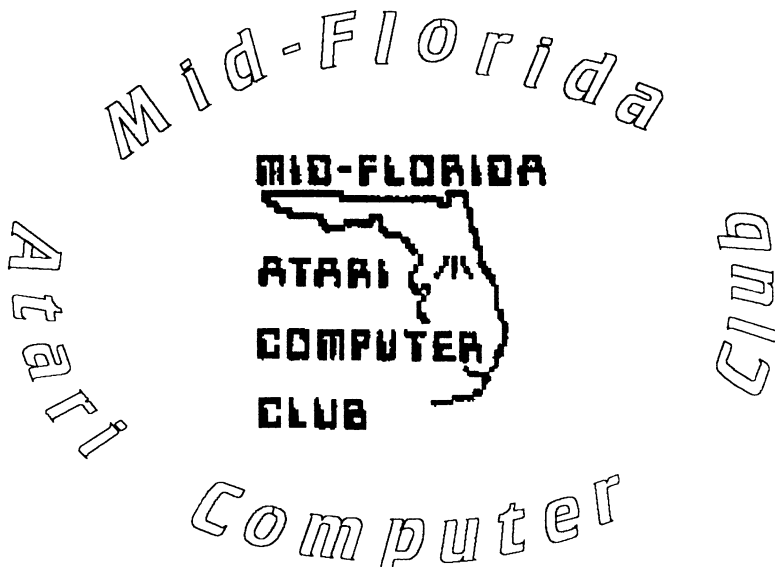
Commidore Sold
Page 9

XE Console Key Fix
Page 12

ST Disk of the Month
Page 14

Atari Artist
(A new column)
Page 17

8-Bit Disk of the Month
Page 29



From the President

THE PRESIDENT IS MISSING IN ACTION!!

IF YOU FIND HIM, DROP HIM IN THE
NEAREST MAIL BOX, HE IS
GUARANTEED POSTAGE PAID RETURN.

1995 - 1996 CANDIDATES FOR THE MFACC OFFICES

=====

PRESIDENT:

BOB SMITH
BILL BAKER

VICE PRESIDENT:

JEFF POTTER

SECRETARY:

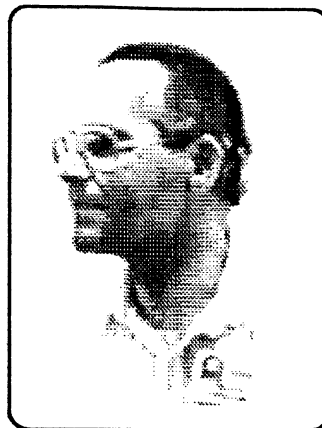
ROBERT RAYMOND

TREASURER:

BILL BAKER
DAVID STEINBERG

TO VOTE YOU MUST DO THREE THINGS:

- 1- RENEW YOUR DUES
- 2- COME TO THE NEXT
MEETING IN JUNE 95
- 3- VOTE FOR YOUR
FAVORITE CANDIDATE!



**V O T E E A R L Y &
O F T E N ! ! ! ! !**

Minutes Of The M.F.A.C.C. General Meeting

Atari Club Minutes
April 9th, 1995

The meeting began at 15:00

1) Jeff Potter will be doing a demo on the 8-bit disk of the month (a floppy indexer). Bob Smith will be showing how to clean disk-drives.

2) All members were told that they should renew their dues.

3) In May, the meeting will be held on the first sunday, rather than the second.

4) The phone committee (those in attendance) received warm thanks from the president.

5) Jim Peach reported for the nomination's committee. The audience was shocked to find that they recommended all of the old officers for their current jobs. A wild melee of nominations erupted

from the floor, resulting in the following nominations...

Vice President: Jeff Potter

President: Bob Smith, Bill Baker

Treasurer: Dave Steinburg, Bill Baker

Secretary: Robert Raymond (who personally wishes to thank the club for supporting his re-election drive. There is nothing that I would rather be doing this sunday evening except typing these minutes!)

6) The club president threatened the secretary and treasurer with bodily harm for talking while he was talking.

7) For the June demo; beer brewing by Gail Kinstrom. Why not?

The meeting ended at 15:17

Some phone numbers you will
need to communicate with our club:



President:
Bob Smith ☎ 299-5374

Vice-President:
John Baker ☎ 823-9705

Treasurer:
Bill Baker ☎ 277-3438

Secretary:
Robert Raymond ☎ 896-7404

Librarians:
8-Bit:
Jeff Potter

ST:
Bob Smith ☎ 299-5374

Publicity:
☎

This newsletter is produced on an Atari Mega STE-4, using Pagestream 2.2
and printed on a Hewlett Packard Deskjet 500

Treasurer's Report APRIL, 1995

Opening balance of	\$611.82
Deposit	12.00
Debit	00.00
Service Charge	10.00
Closing balance	\$613.82



Birthdays for May

*John Morrison
David Steinberg*

All welcomed as new members.

None for May

**HAPPY
MOTHER'S
DAY!!!!!!**

COMING EVENTS

May 95: Nominations Published ~ Renewals
June 95: ONLY paid members vote in Elections
Possible outside presentation.

A Beer and Wine Presentation by the
World Famous Beer Meister and Brewer:
GAIL KINDSTROM

FOR SALE

3 single density drives complete \$10 each
Large selection of new & used software, games
utilities etc. Start mags with disks \$1 each.
SM124 St monochrome monitor \$75
Hard drive boxes & power supplies \$50@
See Bob Smith or call 299-5374

Atari SLM 804 Laser Printer, works with all
Atari ST Computers, 300DPI, Manual, Cables,
Price: \$50.00 or Trade for ST Double Sided Disk
Drive. Contact: David Lerch at (407) 323-7783.



**ORRISON
COMPUTERS**

ORLANDO, FLORIDA

3761 SILVER STAR RD.

ORLANDO, FLORIDA (407)295-6340

AUTHORIZED ATARI

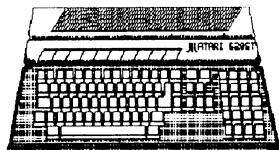
SALES AND SERVICE

OVER 250 SOFTWARE TITLES!
COMPONENT LEVEL 8-BIT, 16 BIT ATARI, IBM, C64 REPAIRS
AUDIO REPAIRS ON YAMAHA, PEAVEY AND MORE.

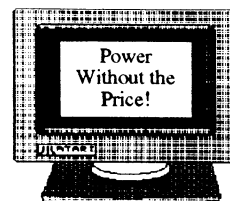
MIDI APPLICATIONS SPECIALISTS

MANY USED ITEMS

New R/C Aerochopper ST/PC/MAC \$225.00
Complete Selection of ST Books and European Mags



The Falcon has LANDED!!!





Microsoft Ships Wine Guide
Microsoft Corp. has released Microsoft Wine Guide, an interactive multimedia guide to nearly 6,000 wines and the world's most famous wine regions.

Hosted by Oz Clarke, winner of the prestigious James Beard award, Microsoft Wine Guide combines tips and insights with an integrated wine reference. A Wine Selector helps users find the right wines for any meal or occasion, says the Redmond, Washington-based software publisher.

Microsoft Wine Guide is available on CD-ROM for the Windows and Macintosh computers. The software sells for \$39.95.

Epson Sues Over Cartridge Ads

Makers of Epson printers have filed federal suit alleging Nukote International Inc. falsely advertises its replacement cartridge for Epson Stylus ink jet printers are "100 percent compatible" and "meet or exceed original equipment specifications."

The suit also alleges Nukote infringes Seiko Epson's patents and uses the Epson trademark on its packaging in a way that misleads buyers.

Director Charles Gunderson of Epson's imaging products unit said in a statement, "Genuine Epson cartridges use patented technology and specially formulated inks to assure high-quality printing and the longevity of Stylus printers and their printheads. We had to file this action to prevent customer confusion and protect the Epson trademark."

Apple Ships Open Transport Beta

Apple Computer Inc. says it has started distributing the beta version of its new Mac OS networking and communications system Apple Open Transport to developers and customers worldwide.

The company notes that the software, which is based on industry standards, brings a new level of networking connectivity, control, and compatibility to current Macintosh System 7 and System 7.5 customers. The product also preserves and enhances the hallmark of the Mac OS built-in support for easy-to-use networking.

According to Apple, Open Transport provides significant management capabilities, such as new flexibility in setting up network configurations. With Open Transport, network managers can

determine configuration settings for network users or allow the users to determine their own settings. Open Transport also supports the Dynamic Host Configuration Protocol (DHCP), which is a new standard that allows network managers to administer addressing and other configuration information for TCP/IP networks from a central location.

Apple notes that Open Transport makes it easy for individual users to switch from one network configuration to another. The software also integrates online help and active assistance, based on Apple Guide technology.

Apple plans to include support for Open Transport in QuickTime Conferencing, Apple Remote Access, AppleShare, PowerTalk, PowerShare, the Copland release of the Mac OS and other products.

Intel Halting '486 Production

By year's end, to solidify the Pentium chip as its core product, Intel Corp. says it will have stopped production of most versions of the 80486 microprocessor.

Reports say that, while no formal timetable for phasing out the '486 has been announced, Intel spokesman Howard High said the



company most likely would make '486 processors only for low-end notebook computers.

Meanwhile:

-- AMD spokesman Chuck Mulloy told the wire service, "We think there is still a very strong demand for '486s. They have left behind an incremental opportunity for AMD."

-- Dataquest analysts predict that about half the PCs sold this year will have Pentiums, but that Pentium-based PCs will outsell 486-based machines by nearly 10-1 by the end of 1996.

HP Reveals Workstation Bug

Hewlett-Packard Co. says it has discovered and corrected a manufacturing process flaw that affects the behavior of some HP 9000 workstations.

The company notes that the flaw can result in inconsistent system behavior -- a "system machine check" message or data corruption in fewer than 20,000 HP systems worldwide. HP adds that the flaw may affect a small percentage of HP 9000 and HP 3000 servers as well.

HP is advising owners of potentially affected systems to immediately contact the HP Response Center or their local sales office for further information and direction. If it's determined that a system is affected, HP will incur the costs associated with repair or replacement.

Win95 Promises Faster Images

A new technology for its Windows '95 operating system that will make imagery in games move quicker is expected to be introduced this week by Microsoft Corp.

Reports say the technology also includes a way to add pre-recorded sounds to games and will have a way to create 3-D imagery.

It's felt that Microsoft's effort may help address an impending threat from new souped-up video-game machines from Sega Enterprises Ltd., Nintendo Co. and Sony Corp. The personal-computer industry hopes to match or exceed performance of those game-only machines with the help of add-on circuit boards that make animation and three-dimensional images move more quickly on a regular PC screen.

The new Microsoft technology for game developers includes DirectDraw, a set of programming code and specifications that allow them to exploit those acceleration boards. David Britton, a Microsoft group marketing manager, said the hardware and software can display 70 frames of animation a second, compared with 30 frames on conventional PCs and videogame machines.

>> Novell

DON'T
FORGET
TO KISS
YOUR
HONEY
ON
MOTHERS
DAY!!!!

Key Issues

(Simple Elegance)

by Robert Raymond

Before I left the April meeting, Bob asked me to write a key issues that very night and post it ASAP. Great, thought I, as, directly following the meeting, I was doing dinner with the in-laws, doing my sunday chores, then writing the minutes and this piece.

Since the wife and in-laws were late to the restaurant, I ordered a beer and relaxed. The beer was cold and had an agreeable taste (it was an Icehouse, if you must know - it was either that or a Bud). So I leaned back and took it easy from an otherwise hectic day, looked into my congenial beer, and let Key Issue thoughts swirl in my head. However, sitting at the next table were a pair of girls - young, just out of high school and thinking that 'now they were adults'. Both were smoking to beat the band, and both talked too loud for that sort of restaurant. One was talking about a recent date that she had been on... "So, like, you know, Brad asked me if I wanted to go to Arthur's 27. That's that really elegant Disney restaurant. So, I get all dressed up and he comes over and he's wearing a suit, but he hasn't shaved. No, he looked really sharp - he had that 'San Francisco Elegance', you know?"

Being a crotchety (Ed. Note: the Author's words, not the editor's) old man of 36, I had to smile. Her fixation on elegance (having used it twice in rapid succession) made me ponder the subject. I'd had a long day of running errands and then racing the bike to the library for the meeting, then racing back to get cleaned up to go to the restaurant. A dark corner table, a comfortable chair, a quiet moment, and a cold beer - that was elegance, simple elegance. 'San Francisco Elegance', that is, looking chic and making a statements (a suit without shaving? Come on!) is not elegance. It's playing your role in your own movie. It's posturing and prancing. It's wasting energy and ask any engineer if wasting energy is elegant. Or a pilot. Elegance is anything that allows a function to be performed with a minimum of energy or processes. Clean, to the point, simplification.

I really didn't think any more about this until I

sat down tonight and looked at my Atari ST sitting next to my PC. Yes, the PC can run all sorts of neat games and graphics with power undreamed when the ST was designed. But then I took a good, hard look at the ST's overall design. The two disk drives that I have daisy-chained together were just coupled in via a cable and were available at the first boot; there was no configuration and no setting of options or paths in a file someplace. In fact, the basic ST would fire up right out of the box, which is what 95% of the population really needs from a computer. The operating system is very rudimentary, but it is, truthfully, all that it really needs to be; I want my OS to be able to manage files, not play solitaire, set up configurations, handle word processing, and keep a calender for me. If I want those things, I will find applications to do them, or write them myself.

A comparison: MicroProse's Railroad Tycoon could be run from disk on my ST. If I invested five minutes, I could put in on my hard drive. On friday night, I purchased Railroad Tycoon Deluxe for my PC. It took me over an hour to get the configuration and memory management down so that the game would run.

So you tell me: which computer is more elegant?

(Editor's Note: This fine article is one of the best descriptions of the Atari Computer that this newsletter has published in a long time. While this editor PERSONALLY agrees with this assessment, it is not necessarily the opinion of the Newsletter Staff or The Mid-Florida Atari Computer Club or it's officers. The editor does wish to pose this question to the writer:

WHY DID YOU BUY THE OTHER BRAND OF COMPUTER mentioned in this article?

Our thanks once again to Robert Raymond for his fine work.)

RENEW YOUR MEMBERSHIP DUES!

> Commodore Update <

- Escom to Buy Commodore?

By Dan Stets,

NEW YORK--Apr. 21--Escom AG, of Germany, picked up the assets of Commodore International Ltd. for the bargain-basement price of \$6.6 million at an auction here Thursday.

About a half-dozen companies interested in Commodore's assets appeared at the auction, but only Escom and Dell Computer Co. submitted bids backed up by the required \$1 million security deposit. Dell's bid was disqualified because the company attached some unspecified conditions.

Escom president Manfred Schmitt said his company would resume manufacturing Amiga and other popular Commodore products and start making Apple- and IBM-compatible computers with the Commodore name for the European market. Schmitt said he would attempt to manufacture all of the traditional Commodore products, even the advanced Amiga 4000, in China. He said he planned to approach Motorola Co. about microprocessors for a new Commodore PowerPC, which would be similar to the PowerMac manufactured by Apple Computer Co. This new PowerPC would likely be built in Europe. Escom has no plans to resume any of Commodore's American manufacturing operations. Commodore had its North American headquarters in West Chester, Pa.

However, before Escom can launch its new strategy, the purchase must be approved by the U.S. Bankruptcy Court in New York and the Supreme Court of the Bahamas, where bankrupt Commodore was incorporated. That approval is not yet certain since Commodore's creditors have not yet agreed to the sale price, and both IBM and the trustee for Commodore's assets in the Netherlands, the United Kingdom and the Philippines are objecting to the sale. Judge James L. Garrity Jr. has scheduled a hearing in U.S. Bankruptcy Court for Friday to consider the proposed sale to Escom as well as the objections. Commodore's creditors are owed more than \$100 million. Previous estimates of Commodore's auction value were as high as \$20 million, so the creditors are likely to have reservations about the Escom sale price.

The auction, which was supposed to be the end of Commodore's bankruptcy saga, was a bizarre affair. A standing-room-only crowd of 65 people filled a conference room at the Midtown headquarters of Fullbright & Jaworski, the American law firm representing Commodore's Bahamian liquidators.

Almost half the group were lawyers. There were representatives of the creditors' committee and of two creditors, Prudential Insurance and Microsoft Co. Also on hand were representatives of a Chinese electronic-game company, New Star, as well as another Chinese company, Tietsin Trust & Investment Co., which is the parent firm of yet another game company.

If its proposal is approved, Escom plans a joint venture with Tietsin to manufacture the traditional Commodore products at a factory near Beijing. Also represented were several small American technology companies, including Computer Connection, of Stockton, Calif., which submitted a bid which was disqualified because the firm failed to include the required \$1 million deposit. One attorney joked that never had he seen so many people show up for an auction prepared to pay so little.

Schmitt said he was not surprised that Escom apparently had been able to acquire Commodore for such a low price. If the other companies had been willing to pay more, they would have signed a contract with the liquidators months ago.

Another likely bidder, Creative Equipment International, of Miami, apparently teamed up with Dell in its unsuccessful bid. The managers of Commodore's United Kingdom team, who have been trying to buy Commodore's assets for months, withdrew before the bidding began. Dell was represented at the auctions by Dalton Kaye, the company's vice president and treasurer, who said after the auction that his company had not yet given up its attempt to buy Commodore.

Kaye complained that Dell had become aware of the auction only two weeks ago and had not yet had time to evaluate either the bid documents or Commodore's assets. Dell, of Austin, Texas, makes personal computers for businesses and individuals. In its latest fiscal year, which ended in January, sales rose 21 percent to \$3.5 billion, and the company had a profit of \$149 million compared with a loss of \$36 million the year before.

Neither the amount of the Dell bid nor of the Computer Connection bid was made public. Kaye declined to specify what conditions Dell had attached to its bid. If Dell is really serious about pursuing Commodore, a shoot-out with Escom could prove interesting. Dell had sales last year of \$3.4 billion. Escom, which is the second largest computer company in Germany, had sales of about \$1.1 billion.

Escom will end up paying the Bahamian liquidators no more than \$5 million for Commodore's assets. The company already has paid the German bankruptcy trustee of Commodore's German subsidiary 2.2 million German marks, the equivalent of about \$1.6 million for the right to use the Commodore logo in Germany.

(Editor's Note: See the following related article)

-/- Escom AG Buys Commodore Assets -/-

At a New York auction, Germany's Escom AG has bought the assets of the fallen Commodore International Ltd. for \$6.6 million, described by The Philadelphia Inquirer as a "bargain-basement price."

Inquirer reporter Dan Stets says some half-dozen companies interested in Commodore's assets appeared at the auction, "but only Escom and Dell

Computer Co. submitted bids backed up by the required \$1 million security deposit. Stets says Dell's bid was disqualified "because the company attached some unspecified conditions."

After the auction, Escom President Manfred Schmitt told the paper his company will resume manufacturing Amiga and other Commodore products and start making Apple- and IBM-compatible computers with the Commodore name for the European market. He said the firm will attempt to manufacture all of the traditional Commodore products, even the advanced Amiga 4000, in China, adding, he plans to approach Motorola Inc. about microprocessors for a new Commodore PowerPC, to be similar to Apple's PowerMac but probably built in Europe.

In fact, the Germany company says it has no plans to resume any of Commodore's American manufacturing operations. (Commodore had its North American headquarters in West Chester, Pa.) "However," writes Stet, "before Escom can launch its new strategy, the purchase must be approved by the U.S. Bankruptcy Court in New York and the Supreme Court of the Bahamas, where bankrupt Commodore was incorporated. That approval is not yet certain since Commodore's creditors have not yet agreed to the sale price, and both IBM and the trustee for Commodore's assets in the Netherlands, the United Kingdom and the Philippines are objecting to the sale."

Remember MOM on

MOMMIES DAY.

With LOVE & KISSES

XE CONSOLE KEY FIX..... (that really works)

By John Nagy

I found that I was not alone when I started having trouble getting my console keys to work on the ATARI 130XE the CHAOS club used for its BBS. It seems that very many of the machines develop this problem. I asked around and found several others that had done as I did, opened the keyboard and cleaned the button contacts, only to get good results for a week or so before losing them again.

I then received a couple reprints of articles suggesting hardware fixes. I tried a couple that did not work, but one that worked the best came from Alan Haskell (printed in the SBACE GAZETTE, April/May '86).

Here's how, with a small modification to save you the trouble I made for myself trying his recommended installation.

You will need a small phillips head screwdriver, needle nose pliers, a small soldering iron, and three 3k (3,000 ohm) resistors. Quarter-watt rating is plenty, in fact, the smaller the resistors are physically, the better.

1. Turn over the XE computer and remove the 4 screws that hold it together. Turn the computer over again and remove the top half of the case.
2. Lift out the keyboard and gently pull the ribbon out of its connector. **DO NOT OPEN THE KEYBOARD** as cleaning internally will not help, and you may damage the carbon tracks on the backing sheet inside.
3. Remove the motherboard from the lower half of the case by removing the phillips screws holding it down.
4. Remove the top and bottom metal shields from the board by carefully straightening the bent tabs that go through the board.
5. Observe the top and underside of the connector you pulled the keyboard ribbon out of.

As seen from the top as you would look at the computer normally, there are 24 connections, with connection #1 at the left and #24 at the right. Connection #3 (from the left) is the ground connection. The last 4, #21, #22, #23, #24 are the START, SELECT, OPTION, and RESET connections. When a connection is made from these points to the ground, the computer will know one or several of the keys are being pushed. Due to a design problem, the console keys have a bit too much resistance to always register even when you really lean on them. So, we will install the three resistors between the connections and ground so as to "leak" a bit more ground signal to the computer. That way, not nearly so good a connection is required by the actual keys when pressed.

6. Identify the proper pins on the bottom side of the circuit board. We will install the resistors under the board.
7. Solder one end of all three resistors together. Then connect this common end to the ground connection (pin 3). Then solder the free end of the resistors, one each, to pins 21, 22, and 23. (The reset system never seems affected, nor any other keys.)
8. Be certain that the wires on the resistors do not touch each other nor any other circuitry! Use as little solder and as short a heating time as possible. Tape the resistors to prevent shorting if needed, and press them close to the circuit board.
9. Reassemble the shields to the board, bending back the tabs to hold it all together. Look inside to be sure the resistors do not touch the lower shield.
10. Complete the re-assembly, taking extra care not to stress or insert the keyboard ribbon too many times. The spring contacts bend easily, and the conductive coating on the ribbon, if scratched through, will cause the keyboard to be useless. Don't worry too much, that's hard to do if you are careful. (The original mod suggested pressing the resistor leads into the connector so as to make it solder-free and simpler.... but that "simplicity" ruined my connector and made hour more work! Solder it!)

11. Test the repair. Power up the machine and type in this one line basic program:

```
10 PRINT PEEK(53279):GOTO 10
```

Then type RUN. You will see a row of 7's down your screen. Push OPTION. They should turn to 3's. SELECT will give you 5's, and starts will give you 6's. Combinations will give other numbers from) to 7. If each key responds, you have finished the repair.

This has permanently fixed the problem on dozens of XE's. It has restored my keys to "feather touch" after a long siege of having to boot 5 or 6 times mashing the OPTION key trying to get a boot without BASIC. It WILL work for you.

(Editor's Note: The editor recommends this repair as he has personally used it. However, the Newsletter Staff, the officers and The Mid-Florida Atari Computer Club cannot and will not assume any responsibility for damage that may be caused. As with all repairs and modifications, be sure to have someone in attendance that is familiar with this type of electronics.)

ST DISK OF THE MONTH

DOCUMENTATION FOR "FDI" A FLOPPY DISK INDEXING PROGRAM

By Bob Smith

One of the worst problems you can encounter is the drudgery of having to find a disk and what files it contains. There are several very good programs on the market and several contain several features others don't. The program that is featured on the MFACC April Disk of the Month is one such program. This one was chosen for the simplicity, features and the purpose. It is called "FDI", which stands for "FLOPPY DISK INDEXING". Again, simplicity and no frills, even in the name.

OVERVIEW

FDI is a program to help you catalog your library of "floppy" disks and the files that reside on each disk. It does not use windows, drop-down menus, fancy colors, or any of that neat stuff. It does give you a complete index of the files you have, what disks they are on, when they were last updated, and lots of room for descriptions and comments.

SETTING UP

To keep things simple, you should keep your Floppy Disk Index on a disk by itself (or in a folder by itself on a hard disk). A single sided disk will have room for about 1,000 entries. To get started, copy FDI.TOS to an empty disk and double-click on it.

START UP

FDI will not run until it sees a valid system date. If the current system date is not valid, you will be asked to enter the current date, time, and

day of week. Use three letter abbreviation for day of week (Mon, Tue, etc.) When all fields are correct press F10 to continue.

When prompted for "Filesystem name" enter the name you wish to assign to your catalog file. This name must start with a letter and be no more than eight characters long. Do not use an extension ("."). If the filesystem you select does not exist on the disk, an empty one will be created. A filesystem consists of three files: the data file with an extension of ".DT" and two index files with extensions of ".NX0" and ".NX1". These three files must be kept together when copied or backed up.

UP AND RUNNING

If you are starting out with an empty filesystem, the first thing to do is Index your first disk (option "I" for Index). CAREFULLY follow the prompts as to when to insert and remove disks from drive A. You should see a new screen:

DISK ID

FDI keeps track of your disks by a four character disk ID. You may use any method you like for assigning these ID's; as a suggestion, I use this:

The first character is a letter indicating the contents or type of programs on the disk (B for BASIC, D for demos, L for LOGO, etc). The next three characters form a number to identify the disk. Therefore, my BASIC disks are labelled B001, B002, etc. My LOGO disks are labelled L001, L002, etc.

The important thing to remember is that no two disks should be given the same ID. If you do not follow this rule, you are guaranteed to lose data. By default, FDI writes the ID you selected to the disk being indexed. If you do not wish to write that Disk ID on that disk, enter "n" in the field "Write ID to disk". If you allow FDI to write the ID to the disk it will write a file called "DISKID.QQQ" onto the disk. Whenever the disk is re-cataloged later, you will not be prompted for the disk ID again. When the Disk ID screen is complete, press F10 to continue.

MAIN SCREEN

Most of the options on the main screen are fairly self-explanatory (or safe to experiment with). However, some may need explanation:

Add -- This option will allow you to manually add a filename/disk to your catalogue. This may be used to index non-standard or copy-protected disks. Fill in the information on the screen. The F10 Function key will complete the 'add' option and return you to the bottom menu.

Beginning of file -- Choosing this option will take you to the beginning of the file. The 'beginning' of file will be dependent upon the prime index you are in (where the asterisk is located).

Delete this record -- The record that is currently displayed will be deleted. You will be prompted at the bottom of the screen - "Are you sure you want to delete this record?" Input "Y" if you are sure. Input "N" if you do not want to delete this record.

End of File -- This selection will take you to the end of your file (according to your current index) and will display that record.

Find -- This will allow you to "Find" a Disk name or Filename. You do not need to enter the full name you are searching for. For example, if your current index is "file name" and you enter "m", you will see the first file that begins with "m". If you enter "me", you will see the first file that begins with "me".

Index -- With this option you should follow the instructions in the "Up and Running" and "Disk ID" sections. You will use this selection whenever you need to read a new disk or read/index a modified disk to catalogue in this program. Carefully follow the prompts when swapping disks.

List -- When you choose this option you will get another screen with Disk ID, File name, File Description, Date last modified, Time, and Size of the file. The options, which are presented on the bottom of the screen are: Next Page, Previous Page, UP ARROW, DOWN ARROW, and F10 to select. If you wish to select a

particular file/record from the List screen, use any of the above selections to get the cursor there, and press F10. That record will then display on the screen.

Next Entry -- This option will display the next record in the file, according to the current index.

Output to printer -- Printing will start at the record currently selected and continue until end of file or until you press the 'Q' key. The report is sorted by file name or by disk ID, depending on the current index.

Previous Entry -- This selection will allow you to view the previous entry of your records. As in all Next or Previous fields, it is alpha-based and dependent upon the Prime Index you have chosen.

Quit this program -- This will take you back to the GEM Desktop.

Switch prime index -- As you travel forward or backward thru your files you see entries in sequence by either file name (the default) or by disk ID. The sequence ("current index") is shown by the "*" next to the field name. You can change the current index by pressing "s".

Update this entry -- With this selection, you will be able to modify or add to any of the fields that are present in the displayed record. A frequent use of this selection would be after indexing a disk - you might want to type in descriptions of the files.

View Disk Directory -- With this selection, you will see 'Closing' at the bottom of the screen. Following this, you will be prompted to insert the disk you wish View. It will show you the Filename, Date last modified, Time, and Size of each file on that disk.

WARNINGS AND SUGGESTIONS

Rule number one is: ALWAYS finish out of this program by using the 'Q' option. DO NOT power off or re-boot while updating; doing so will certainly confuse the database, scramble data, or wreak general havoc.

Rule number two is: ALWAYS keep backups of your filesystem (name.DT, name.NX0, name.NX1). Remember, even if you are updating only one entry, your whole database is subject to loss! As your database expands (and you have more time and effort invested in it) you will want to keep more than one copy.

If your system has enough memory (one meg or more) you may want load your filesystem to a RAM disk for updates. Some of the functions require a lot of disk accesses, and things go much more quickly on a RAM disk (or hard disk).

KEYS ENABLED IN FDI:

Backspace -- This key will move the cursor backwards and at the same time delete the character you Backspace over.

Left Arrow -- This key will move the cursor back (left) from where it is currently positioned. It will not delete or overwrite the characters currently there.

Shift Left Arrow -- This key moves the cursor to the first position in the current field.

Right Arrow -- This key will move the cursor forward (to the right) from where it is currently positioned, without deleting the characters it is going over.

Shift Right Arrow -- This key moves the cursor to the last position in the current field.

Insert -- When you depress the Insert Key it will allow you to "Insert" a character in the position of the cursor.

Space Bar -- This key will overtype the characters that are 'spaced over' with the space bar.

Clr Home -- This key will clear the contents of the entire field that are you currently in.

Return -- The Return key will move the cursor to the next input field.

Up Arrow -- This key moves the cursor to the previous field.

F10 -- The F10 function key generally finishes out of the current screen and/or enters the data into the file.

Delete -- The Delete key will allow you to delete the character(s) that are positioned at the cursor.

UNDO -- The UNDO key allows you to leave an update screen without changing the data in your file.

Well, that's about it for this month and Comments and suggestions are welcomed about the usage of this program. The original program and information was written by Rod Waener.

ATARI=ARTIST=ATARI=ARTIST=ATARI=ARTIST=ATARI=ARTIST

ATARI=ARTIST=ATARI=ARTIST=ATARI=ARTIST=ATARI=ARTIST

Atari's recent announcement they no longer have any Falcons left in the warehouse and have no plans to manufacture any more - has cast somewhat of a pallor over the otherwise party animal Atari user community. Although Atari has licensed manufacturing rights to the European-based C-Lab, it is not clear whether this music-oriented "clone" (14 megs in a stock Falcon case with an added 500 meg internal SCSI HD and altered -10db input/output line-level) will be distributed widely outside of Germany.

Page # 17

This new/old hybrid represents the original machine with a few on-board alterations that any Atari repair house could just as easily effect (larger SCSI HD, maxed memory, etc.) But when you take the original cost of a 1 meg Falcon and add that to the individual cost of the improved stuffing in this bird, there appears to be roughly \$1200 left over which I, despite all my efforts, can't seem to find the hard goods to justify. Hmmm... Meanwhile, back at the ranch...

We've got the latest updates on Wizztronics' Barracuda 040 along with a mini-review of Zero-X. We've also got a report on the recent Music Messe in Germany, the country which - as the legions of devoted German Atari computer owners have been moved to otherwise refer to it - easily earns the monikered title of "AtariLand!" As you might imagine, there's more new things Atari in that thar heavenly place then Horatio's pessimistic philosophy ever dreamed of naysaying.

In the Atari graphics arena the latest buzz concerns two very impressive programs that have recently been released for the Falcon - Apex Media (now available here in the US) and Neon (available in Europe only at that moment). The first product offers a 2-D paint, graphics and animation/ morphing environment, while the second is a 3-D animation, rendering and ray tracing suite. These exciting new products are very impressive, both in the number of powerful features and a flexible environment in which you can create and manipulate graphic objects to produce some very professional-looking masterpieces.

And away we go....

MUSIC NEWS

FALCON REBORN AT GERMANY'S MUSIC MESSE

C-Lab's Falcon MKII held center court at Germany's recent Music Messe (Europe's version of our annual NAMM music expo) this past February, as a steady stream of showgoers flocked to get a glimpse of the heir apparent as it emerged from the shadows for its maiden flight. Reaction from "AtariLand"'s loyal subjects ranged from optimistic to ecstatic that the obligations of carrying the torch in manufacturing the Falcon are being taken up by a third-party company wearing an old, familiar face.

For those newcomers to the Atari world, C-Lab made Atari synonymous

with MIDI production throughout Europe - as well as here in the States - with their popular line of music sequencing & notation software. Best known for Notator, unquestionably the first Atari music application (could very well have been the first one on any computer platform) which brought together unparalleled notation and scoring flexibility and feature-driven sequencing power under a sophisticated, unified working environment, C-Lab was king of the hill in the early years. Although the last version released before the program was taken over by U.S.-based E-Magic is certainly no match for the dazzling interfaces and capabilities of today's MIDI music applications, there are literally tens of thousands of die-hard, devoted Notator users out there, even as we speak, who refuse to entertain the notion of ever using anything else!

What is somewhat ironic is that, back in the days of the sequencing wars - yes, Virginia, there was once a great wall which split the heart of Germany right down the middle and a great MIDI program battle which raged day and night there as well - it was all Germans could do just to have a moment's peace without being woken from their dreams or distracted from their work by the bellowing cries of, "We'll bury you alive!" and, "Your name is history!" echoing back and forth between the headquarters for C-Lab and Steinberg. Needless to say, there was no love lost between these two major competitors.

Given enough time, the saying goes, even the worst of former enmities are worn down into the best of friendships - although, sadly, the reverse is also true. At first, walking towards the Steinberg booth, which dominated its location with an impressively large, centrally-located booth, you wouldn't have suspected anything other than the eagerly-awaited surprises Steinberg would be premiering at this event.

But, once you began to explore the rather formidable perimeter of the Steinberg booth, those who remember the old days were knocked on their kopfs to see C-Lab hawking their wares right within the bosom of their old adversary! As if that wasn't enough of a total surprise, upon closer inspection, it became apparent that C-Lab occupied what many would consider (given their former relationship) a rather generous section of Steinberg's real estate.

C-Lab's Falcon MKII features the C-Lab logo prominently displayed on what is actually an exact replica of the Falcon's original 1040-styled case. That's because C-Lab has officially assumed supervision of Atari's former manufacturing plant in Taiwan, and licensed rights and access to all the original molds and schematics for the Falcon. At the helm of this ambitious undertaking is C-Lab founder and PR wizard, Burkhardt Burgerhoff, whose fire, intensity and desire to succeed were clearly evident as he carried on business meeting after merchandising session after media interview practically non-stop throughout the entire length of the show.

Apart from limiting choice of memory strictly to 14 megs, replacing Atari's stock 80-meg internal IDE drive with a 500 meg internal SCSI drive (which means you can now easily save your audio files to your

internal drive with a bit of room to spare) and making a much-needed improvement on the specs for the Falcon's easily signal-overloaded stereo in/outs, a number of minor improvements have also been addressed in the MKII.

All the timing fixes which plagued a number of both original and subsequent machines have been implemented in this latest incarnation of the Falcon. In addition, a software plug-in has been added which, when placed in your AUTO folder, allows for switching between 1040 and Falcon modes so as to be able to successfully use C-Lab's Notator, Creator (Notator without the notation features) and all of C-Lab's well-known hardware peripherals. Prior to this clever software solution, you couldn't run any of these products successfully on the Falcon, due to a number of inconsistencies between the program code, the 030 and the Falcon's architecture.

Burgerhoff apparently sees two initial markets for his MKII. One is obviously the musician or small studio who's looking for a turnkey system which can provide digital audio and MIDI capabilities. They're also handling 14" VGA monitors offering a paper-white display in ST high rez mode, as well as a variety of both fixed and removable Syquest SCSI drives in a variety of sizes. Improved -10db input/output line-levels and compatibility with older MIDI software will certainly make the machine more appealing to those users who, up to now, would rather stay with their older machines in order to use their favorite programs.

The addition of an internal 500 MB SCSI hard drive not only offers direct saving and accessing of your digital audio files, but offers roughly 40 minutes of stereo recording at industry standard rates, 10 minutes of linear audio across 8 tracks or roughly 10 minutes of audio across 16 tracks by utilizing the 030 for data compression and decompression. There's actually room for approximately 46 minutes of stereo recording and 12 minutes of 8/16 track recording - but you'll need to set aside enough space for a C: partition to hold your AUTO folder, system-related programs and accessories, along with your music sequencing, notation and editor/librarian software.

The other market is obviously those tens of thousands of Notator/Creator owners who would love to upgrade their Atari to the next level, but have been reluctant to do so because of its inability to run C-Lab's former products. Will this be enough to keep the Falcon flying at a \$3,000 U.S. price point? I guess we'll know next year how the market will respond.

/// Future C-Lab Developments ///

C-Lab is also looking ahead towards future product releases. They were showing a Falcon installed within a 2-space high rack unit. Additional features will include 8 balanced audio outputs, PDIF/ADAT optical

Copson Data, the original Swedish developers of the program, has confirmed that they are indeed planning to implement virtual memory which will allow loading playback and saving directly from hard disk in a near-future version.

Zero-X fully supports such software accelerators as Warp9 and NVDI, as well as BlowUp 030 and Screen Blaster video enhancers. As an alternative to the Falcon's less than professional digital-to-analog converters, Zero-X also supports playback using either Soundpool's Falcon Digital Interface or Steinberg's Falcon Analog-8, giving you the pick of studio-quality DA converters.

The program currently supports both MIDI and SCSI interfaces for sample transfer. Support for two other sample transfer interfaces, Atari's older ACSI hard disk interface which is featured on pre-TT 030 machines, and Yamaha's RS422 for use with their TX16W sampler are expected to be added for the next update.

MIDI-wise, Zero-X supports sample dump standard, v1.0 closed loop in 12 and 16 bit formats, as well as S-50/550, ASR-10, EPS, EPS-16 and Akai's series of both 12 & 16 bit samplers. Also supported is SDS. Though somewhat of a universal format, some samplers may miss pre-set crossfades and loop settings in a sample using this format. Zero-X also has a cool feature which lets you transmit data right up to the loop end part of the sample as an individual chunk. You can then assign this as a loop in your sampler later on.

SCSI-wise, Zero-X lets you send and receive samples via the Falcon030 or the TT030's SCSI interface. On the receiving end though, your sampler or sound module has got to support Akai's S series or Peavey's SMDI (SCSI MIDI Device Interface) in order for SCSI communication to be established.

A great feature is the Convert Control, which lets you load and convert single or multiple files in no less than 7 different formats. These include: Atari's .AVR, CuBase Audio .AIF (non-compressed), Avalon .SD, (Sound Designer 1) PC/Windows .WAV, WinRec's .DVSM, Digidesign's Samplecell .WAV, .RAW files (sans header), Dame's .TKE and 8/16 bit, Stereo/Mono, Signed/Unsigned. Large files are read off your hard drive in sections equal to available memory, so you're not limited by the actual size of the file itself!

Zero-X has a number of features which you'd normally find on most hard disk recorders, including Cut, Copy and Paste. Also included are Optimize, which maximizes a sample's volume without creating the usual added distortion, as well as such features as Silence and Fade Out, which come in handy for knocking a highlighted area to down to zero volume.

There are also some additional features in Zero-X which really make the program unique on the Atari platform. You can convert a sample rate without changing the pitch as well as convert a sample freely between mono and stereo. Zero-X's digital noise gate feature allows

But, as if that weren't enough, what's really amazing is how well Zero-X makes it so easy to sample and synchronize a beat loop to a sequence. An Auto Drum Loop option lets you create perfect loops the first time around, with almost effortless ease.

You can also create a standard MIDI file right from these split points, so you can capture the actual rhythmic "feel" of the loop as well. Quantize it, push up or back a kick or two and hey... instant DNA Groove templates!

For more information contact: Wizztronics
P.O. Box 122
Port Jefferson, NY 11776
(516) 473-2507 Voice & Fax Mail

After months of talk, speculation and delays, Steinberg surprised showgoers with an actual running demo of its long-awaited sample editing program, Avalon. Steinberg really played this card from close to their vest, because even their roster of highly-regarded U.S.-based beta testers never saw a single version during the development of this popular application. This fact leads us to believe that it was done totally in Germany and on the QT.

Avalon's intensively graphic environment follows the ground-breaking tradition of Cubase, offering a Universal Sample Editor which currently supports 22 different sampler models. You can edit your samples on-screen using a wide variety of tools, such as Cut, Loop and

Optimize, or use Avalon's intelligent Time Correction to create a new pitch while keeping the length of the sample, as well as the reverse. Avalon's Resynthesis feature lets you manipulate your samples by processing them through a variety of filters and envelopes. You can even design your own synthesizer based on AM/FM/PD or other sound creation principles, and a mixer/editor.

A powerful system for sound creation, editing, and archiving, Avalon also follows Cubase in offering a modular structure - the specific modules which manage the selected forms of processing for your samples can be individually loaded into memory, leaving enough space for your actual samples.

As a control center, the combination of Avalon and Steinberg's MidexPlus functioned as a central sample routing system, which might include a number of samplers, sample players and data storage devices, all controlled via a single user interface. Avalon organizes data transfer between samples from different manufacturers and automatically converts all formats between 8-bit mono and 16-bit stereo, from 5 to 65 kHz.

Avalon's Unique Synthesis page, reminiscent of DigiDesign's SoftSample, there's a multitude of powerful sound creation and editing functions at your disposal, such as:

- ☐ Additive Synthesis
- ☐ Karplus Strong-Synthesis
- ☐ Fractal Sound Generator
- ☐ Wave Transformation
- ☐ Amplitude modulation
- ☐ Frequency modulation
- ☐ Ring modulation
- ☐ Phase Distortion
- ☐ Envelope with up to 255 Points
- ☐ Envelope Follower
- ☐ Cutoff Filter
- ☐ EQ
- ☐ Delay
- ☐ Wave shaper
- ☐ Pitch Shifter
- ☐ Amp
- ☐ Mixer

These functions can all be freely combined to simulate sounds from popular synthesizers or, if you're really adventurous, you can create exciting new synthesis concepts. You can start from scratch, or use your samples as basic material for sound creation. Sounds can immediately be monitored, sent to a connected sampler, or loaded into one of Avalon's various Editors. There's also a set of Library functions which make sound management a lot easier, allowing you to store all your sounds in a large Library so you don't have to deal with specific instrument or mass storage device types.

You should take note here that this particular section is not for everyone, however. There's no simplified "Push This Button" feature in Avalon which automatically produces cool synth patches on-the-fly.

These set of tools, although certainly powerful, are really best utilized by those musicians who, the minute they buy a new synth, love to dump the factory patches and start creating new ones from scratch.

If that's what you're into, then you'll love building sounds with Avalon!

Avalon has a number of editors which offer wide control over different aspects of your samples' shape and contents:

The Time Domain Editor module lets you perform a large number of digital processing and altering functions on samples, using a variety of tools:

- ☐ Fade In/Out
- ☐ Revert
- ☐ Optimize
- ☐ Redraw
- ☐ Resampling
- ☐ Truncate
- ☐ Filter (Peek, Notch, Lowpass, Highpass)
- ☐ Programmable Cross-Fade
- ☐ Stereo Editing
- ☐ Loop Set and Find (up to eight loops supported)
- ☐ Block Functions (Cut, Erase, Add, Subtract, Mute, Delay)
 - ☐ Zoom
 - ☐ Overview
 - ☐ Loop Split
 - ☐ Marker
- ☐ GoTo commands
- ☐ Play Block/Window/Sample
- ☐ Pitch Detection

You can edit up to 9 samples simultaneously, memory permitting, and Avalon supports sample display on large screen monitors with various screen resolutions (e.g. Atari SM194, Matrix 110).

The Frequency Domain Sound Editor module offers high-resolution Fast Fourier Transformation, allowing specific editing of single frequencies in the micro domain and manipulation of the total spectrum, utilizing such macro functions as:

- ☐ Spectral Animation
 - ☐ Threshold
 - ☐ Pitch Shift
 - ☐ 3-D Filter

The accuracy of the Fourier Transformation can be further increased in Avalon's Professional mode. 3-D spectrum analysis can be viewed from any angle and also be impressively displayed on large screen monitors.

As an alternative to a 3-D plot, spectral values can also be displayed

as a Sonogram.

The Frequency Domain Editor's Play Timeslice feature allows you to hear what you see by making single time slices audible. The various tone colors of single sound sections can be monitored both visually and aurally.

The Time Correction Editor module allows you to shorten or lengthen a sample without changing its pitch. Both subtle and drastic changes are possible. The Pitch Detection function displays the pitch of a sample in musical notation.

Some additional Avalon features:

- Many keyboard equivalents
- An Undo function
- Virtual MIDI Keyboard

Steinberg also offered a number of hardware options for Avalon 2 as well. A 16-bit D/A board for Mega STs let you immediately monitor any changes or processing of a sample in 16 Bit Stereo quality, without the need to transfer sample data back to your instrument first.

An optional external SCSI controller connected to the ST's cartridge port increased sample transfer rates as much as 250 times, as well as allowing Avalon to communicate directly with a variety of SCSI external hard disks, removable cartridges and optical disks.

So... What's New In Version 3?

I thought you'd never ask!

- Realtime monitoring of sample edits
- Bidirectional SCSI transfer
- Virtual memory
- Built-In Akai editor
- Expanded sound synthesis & sound harmonics features

As you may have guessed, Avalon 3 adds full support for the Falcon 030! This means that the aforementioned additional hardware options you had to pay extra for (or were drooling over as you pressed your nose up against the music store window) are now available to all Falcon owners. This is a major improvement over Version 2. Most users relied on using the far slower MIDI Sample Dump standard to send and receive their samples.

In addition to direct SCSI transfer and instant monitoring capability for edits or changes as soon as you apply them to your sample, Avalon also supports Virtual Memory! Avalon no longer limits the size of your sample based on how much RAM your computer has on-board. This means

you can edit those long Cubase Audio files with no problem. Avalon 3 reads and writes sample data directly to your hard drive, offering unlimited sample editing capabilities.

As well as supporting MIDI Sample Dump Standard, Avalon is compatible with following samplers:

- ☐ Akai S1100, S1000, S950, S900, S700, X7000
- ☐ Casio FZ1
- ☐ Dynacord ADS, ADD2
- ☐ EMU Emax III/II
- ☐ Ensoniq EPS, EPS Plus
- ☐ Kurzweil K2000
- ☐ Prophet 2000
- ☐ Roland S50, S550, S330, S770, S750
- ☐ YAMAHA TX 16W

For more information, contact:

Steinberg/Russ Jones Marketing,
17700 Raymer Street, Suite 1001
Northridge, CA 91325
(818) 993-4161
(818) 993-4091

////////////////////
/ Other Messe Stuff To Check Out
-////////////////////

Soundpool, manufacturers of Steinberg's Falcon Digital Interface (FDI) also have plans to release a Falcon-In-A-Rack. Their 2-space deep green unit will come with a detachable keyboard and 19" monitor support and - what else of course but a built-in FDI, along with 4 independent MIDI Outs. They were also demonstrating Audio Master, a software-based master list system which will allow assembly of play lists from different digital audio files, and a preliminary of their Falcon 8-track digital audio recorder/editor along the lines of DigiDesign's Sound Tools. No word on actual release dates or availability.

Friendship (yup, that's their real name) debuted a number of great hardware peripherals for use with the Falcon. A number of them include software to provide direct access through your Atari interface. Their products included a hardware sample rate converter, a MIDI multi-output port expander (MO4) offering 4 MIDI outs, and a hardware digital routing switcher featuring 8 RCA in/outs and 2 optical in/out SPDIF ports - all at a surprisingly low price point.

////////////////////
/ Download Watch
-////////////////////

This particular version comes with documentation in German, but the program seems to employ English menus and dialog boxes. Since it requires a CD-ROM you might use METADOS, though I highly-recommend getting ExtenDOS (Anodyne Software), which really makes using a CD-ROM with an Atari a breeze.

Anodyne Software
6 Cobbler Court
Ottawa, Ontario, Canada K1V 0B8
(613) 523-7498

BARBARRACUDA UPDATE

Steve revealed some additional enhancements which have been implemented along the way to 040-hood. A number of built-in video resolution enhancements have been added which will allow for a wider range of resolutions - up to 1280x1024 (monitor-dependent, of course) which will be configurable through included software. This is similar to the kind of results achieved by such screen resolution enhancers as BlowUp 030 and Screen Blaster.

Unfortunately, getting True Color mode to work without having that annoying flickering on your screen is really a memory-related problem which is dictated by the Falcon 030's initial architecture. Rather than designing the machine with its own separate video RAM, Atari

ATARI 8-BIT DISK OF THE MONTH

*****May, 1995*****

by Jeff Potter
MFACC 8-Bit Librarian

Well it's been another hectic (and short) month. So for a change of pace I've made the disk of the month from a new game demo that appeared recently. I'll give a little description of what it's like, and fill the rest of the column with current breaking news on the Atari 8-bit front.

F.R.E.E., from Epsilon Software

This month's double-sided disk contains a playable demonstration of F.R.E.E. which stands for "Funny Risky Evil Escape". It's a graphics/text adventure game, a little similar to Sirius' classic *Gruds in Space*. At each location you get a (well-done) graphics 15 picture showing the view of the room. With the space bar you can toggle from that view to a text screen where you can enter commands. Most of possible actions can be done by selecting the "verb" (like "take", "push", "drop", etc.) after which it asks you what to take, drop, or push. This is all accomplished with either the joystick or your arrow keys. It also allows you to show a current map of where you've been, and allows you to move quickly between already explored rooms if you want.

This limited demo only shows you two floors. The final version is contained on five disks, and contains 100 full screen images! The programmers, Bertrand Le Roy of France, and Fabien and Anne Royer of the USA, are asking \$20 for the released version.

The fine artwork, and the easy-to-use text menu system show that a great deal of work was put into this game. The game seems to be not very difficult, at least in this limited preview, and the "Help" command can usually give you some clues as to how to continue. I didn't see any signs of a scoring method, and the ultimate goal seems to be only to escape.

The introduction screen contains a somewhat familiar classical tune (50 points to the first one to tell me the name of the composition), and leads to a scrolling information screen. The authors give a paragraph or two about the evils

of piracy, and encourage us to support them and other authors of Atari 8-bit software. I applaud them, and hope they get enough orders to justify writing more good software.

ATARI 8-BIT NEWS

I collected the F.R.E.E. demo from the comp.sys.atari.8bit newsgroup on the UseNet. This is accessible from local Internet service providers, and from CompuServe (and probably the other major service providers). Postings on that newsgroup have been pretty rapid lately, with 60 to 100 new messages a day. A month or so ago a major flame war was started by some out-of-country Atari users who insisted that all old Atari software should now be public domain. They were wanting to collect all their pirated software and fill an archive where anyone could download the stuff. This flew in the face of the mostly law-abiding Atarians who inhabit the c.s.a.8 area. It was pointed out how outright piracy and copyright infringement would totally cripple the remaining Atari hardware dealers and mail order distributors (who are having a hard enough time as it is). The flame wars raged for a good two weeks, and the law-abiding Atarians seemed to have won out.

The second issue of the reincarnated Atari Classics magazine finally made it to subscribers this month, with the software disk. Editor-in-chief Jim Hood was stricken with throat cancer, which demanded surgery that's left him eating through a straw for a couple of months. Jim's in good spirits, and the prognosis for his recovery appears to be good. Bob Woolley filled in, and provided some great articles from himself and other authors. There were also a good assortment of advertisements, showing there's still support for our aging computer.

I've been hearing a lot about Mike Hohman (of Fine Tooned Engineering, who bought the rights to all the 8-bit hardware and software from ICD). He has developed, and is nearly ready to release, an interface for the 8-bit to use the powerful and inexpensive IDE hard drives. In addition he has (also nearly ready) an upgrade from the old 6502 processor to the (more nearly) modern 65816. This will be bundled with a new version of John Harris's fine MAE editor/assembler/monitor program (see an earlier 8-bit DOM this year for information on this program).

GENie (trademark and servicemark of GE) this month added their gateway to the Internet. Their interface provides gopher, FTP, telnet, and cruising the World Wide Web via Lynx. What's significant about this is that our Ataris can use an 80-column VT100 terminal program (like FlickerTerm or IceT) to access everything. The other services may require a Windows-based front end program to get to the Internet, leaving us 8-biters out in the cold. Give GENie and the Internet a try, and check out Ivo van Poorten's 8 bit page (<http://www.cs.vu.nl/~ipoorten/Atari/8bit.Homepage/index.html>), the umich archive (<gopher://gopher.archive.merit.edu:7055/11/atari/8bit>), and James King's FTP site (<ftp://ftp.xmission.com/pub/users/j/jeking/8bit>).

And so ends another monthly column. As always, I'm open for suggestions on future themes for 8-bit DOMs. Drop me a line on Bob's Inner Core BBS, or write me at:

202 Chestnut Ridge St.
Winter Springs, FL 32703

**IT IS YOUR RIGHT
& IT IS THAT TIME
AGAIN:**

**RENEW YOUR
CLUB
MEMBERSHIP
DUES. STILL ONLY
\$12.00 PER YEAR.
THE BEST BUY
AROUND!!!!!!!!!!**

decided that the Falcon could use a varying portion of the machine's installed memory. In addition, the Falcon's on-board chips can only sync to a limited frequency band. There are a number of other aspects of the Falcon's architecture which also contribute to its limited video capabilities, but that's another article in itself.

These decisions, though efficient for a number of functions, ultimately killed any possibility for directly expanding the video capabilities of the machine without redesigning it from the ground up. To make things more complicated, the Falcon's proprietary use of internal RAM is 16-bit, while the 040's architecture dictates that any efficient maintenance of speed requires 32-bit FastRAM, as is the case in using the optional RAM Expansion Board. There IS a solution down the road for this dilemma, waiting in the wings. For now though, the fix for delivering jitter-free True Color is still-to-come. Probably the singularly most impressive aspect to The Barracuda 040's design is the direct result of a particularly difficult hurdle to overcome: how can the OS, optimized for an 030 instruction set to access at a 16-bit bus width, successfully communicate with an 040 processor's instruction set which requires access at 32-bit bus width? Steve and his team of Wizztronics' engineers came up with what can only be described as a truly brilliant solution: transfer a copy of the OS to another chip, one which is optimized to communicate with the 040! This'll be accomplished through the one-time execution of specially written software which will read the Falcon's TOS and will

pass it along to a separate ROM, which employs Flash Memory, on the Barracuda board. This, in effect, creates a full 32-bit TOS which the 040 can address exclusively as its sole, proprietary OS.

As an added bonus, this will also afford users a hassle-free procedure for upgrading to the next generation of TOS, should there be one. Any future OS upgrades can now be effected through software no more having to open up your machine to pull out your old TOS chips in order to install a newer version!

Users will have the additional option of purchasing a toggle switch kit which will allow switching between 030 and 040 modes. It should be noted that installation of The Barracuda

Preliminary benchmark testing using Quick ST's benchmarking program (a widely-respected standard in the Atari industry) yielded some impressive results. The Barracuda 040 showed an overall system performance increase of 500% - estimates with the RAM Expansion Board are slated at over 900%.

Built-In Upgradability

One is a VME 96-pin expansion slot for interfacing with Wizztronics' RAM Expansion Board, which is capable of holding an additional whopping 128 megs of 32-bit FastRam.

As if each of these two add-on slots were not
(ATARI ARTIST CONT'D) amazing in and of

themselves, there's room left over for a third option - a 50-pin (sometimes referred to as a dual 25-pin) IDC slot which will easily allow for the addition of

Wizztronics' forthcoming Video Funnel. Essentially a video-expansion bus, this card will enable both direct still and moving video to be captured off of any external video source.

Another upcoming add-on option is Wizztronics' video display card, which will feature 4 megs of on-board RAM and will support up to 1024x768 true color. These expanded video modes will be attainable using any software that does not otherwise directly address or exclusively dependent on the Falcon's hardware for video. For those who are already using one of the many third-party video cards available for a variety of Atari computer models, if the program works with your current video card, it will work with this one as well.

Steve plans to design this add-on card so that, even if all three slots are occupied by the previously mentioned cards, the video card can still be used. This will be achieved via a pass-through feature will already be built-in to these cards - still another example of Wizztronics' forward thinking and excellent design! The first two expansion cards are done and awaiting The Barracuda 040's final logic compiling and code debugging. The Video Funnel is near completion, and awaiting the launching of the accelerator board.

GRAPHIC NEWS

/// **APEX MEDIA** ///

Page # 31

way it utilizes the DSP and also works within and exploits the limitations of the Falcon's video capabilities. Originally developed by Black Scorpion Software as the ill-fated Chroma Studio 24, due to a variety of difficulties it never saw the light of day.

Although similar in features to Chroma Studio 24, Apex's effects engine is much faster and an estimated 15 functions directly employ the use of the Falcon's DSP, which allows Apex to perform many of those special-effects transformations, like Block Distorting and Animation Filtering, almost as fast as if they were being carried out in real time.

Just take a look at some of Apex's impressive features:

- ☐ Realtime image processing
- ☐ Analog mask filtering
- ☐ Realtime block manipulation for distorting/rotating//scaling
- ☐ Vector-based font interface for scalable type faces
- ☐ Ultra-fast fieldwarp morphing and distortion
- ☐ Frame-by-frame animation processing
- ☐ Direct-disk editing of FLIC & ANIM animations
- ☐ Supports hardware interface for single or video frame grabbing in True Color at 786x576
- ☐ Animation formats supported include FLI, FLH, FLX, ANM (Chronos) plus APX, Apex's own proprietary format.

When you first boot up the program, Apex Media automatically shifts the VDI down to 320x200. ST 40 column true color mode is achievable, but only on a super VGA multisync. The program supports virtual screens as large as 1024x768, which are viewed or moved to by clicking and holding down the mouse in any section of the work area and dragging the mouse to scroll around the screen. A single work window dominates the majority of the screen, featuring a fixed palette of tools located on the left hand-side and an additional functions button bar along the top of the window. Right-clicking on a tool brings up a configuration box for that tool.

Apex uses an iconic toolbar interface, similar to Calamus. Selecting an icon turns the left-hand side of the tool area into a nest of icons which

cover a varying number of related options. Developers at Black Scorpion opted to go for speed, which required abandoning the comparatively sluggish GEM display routines in favor of a more responsive, open-ended interface which has the added advantage of using a lot less memory. This affords a very impressive level of image processing with a minimum of only 4 Megs of RAM on a 1040STe, although it's a lot slower than using a Falcon.

Located on the top tool bar are a roster of standard drawing tools covering lines, shapes and fills, block manipulation, color palette manipulation and the video-digitising interface. Following that are the non-linear tools; airbrush and masking, image and film filters, morphing and distortion tools and outline text tool, which uses Calamus-supported font formats.

Tools include a Pen, Pencil and Poly Bezier Curve, as well as Square, Circle, Ellipse, Triangle and Polygon Line Tools. An Interpolator Tool allows you to resize a shape and perform a gradient fill based on the colors that lay beneath it.

Gradient Fills can also be accomplished by selecting a range of various colors from the color palette. The Realistic Airbrush provides control over both speed and dispersion by using the right

mouse click feature. The Realistic Brushes and Fill Tools include options for applying a thin wash. A powerful set of Masks options allow for, among other functions, shapes to appear or be contained within a defined area.

A Bitmap Manipulation Marquee (dotted line outline) allows you to copy, cut, paste, flip, skew, distort and proportional resize any area of your work selected. Using the left mouse button selects and sizes your selection, with multiple selection supported, while the right mouse button commits the results of the manipulation to be pasted to your work. Similar direction isolated re-sizing and positional placement can be achieved by clicking anywhere other than in the corner of your selection. There's a De-noising Tool which renders either sharper edges or smoother, softer edges to a photo, as well as affect a foggy, out-of-focus result.

Morphing capabilities are awesome! You can establish a start and end frame and Apex

automatically generates the fill-in frames - the number of which are user determined. Morphs are achieved by selecting two images and then positioning and manipulating any number of morph points to both images. A single 640x480 frame takes approximately ten minutes, while a 5-minute animation would take approximately 24 hours to render in that resolution. This is reminiscent of the kind of processing time need for sophisticated ray tracing. The program comes with a number of sample morphs, including a woman changing into a leopard and a parrot becoming a flamingo.

Built-in interfaces for capturing video include support for the European-based Matrix ScreenEye and Expose video digitizing cards. Apex also has some unique capabilities for processing images. A special sampling feature allows images to be rescaled to fit the Apex canvas without losing any of either the original file's detail or color depth.

Apex Media really goes to town in the area of video. Reminiscent of some of the effects which can be achieved in Fractal Design's impressive Painter 3, Apex's motion-blur filters produce some impressive effects when working with animations and digital video. Additional filters include smoothing, anti-aliasing, noise removal and a set of almost intuitive interpolative tools that can track and isolate underlying color changes between layers.

Animations originally created in Apex's proprietary 320x200 resolution can be played back in modes ranging from 256 color to True Color at 70Hz using a VGA, SVGA or multisync monitor and external players/ viewers can achieve overscan (768x576) True Color on professional broadcast monitors and television monitors. The program also supports 320x400, 640x200 and 640x400 resolutions with 256 colors, as well as 16-bit or even pseudo 24-bit palettes.

Apex loads a wide variety of images. Supported formats include:

- [] Targa
- [] GIF
- [] IFF
- [] Spectrum 512
- [] Photochrome
- [] MTV raytrace
- [] JPEG

Both images and animations can be overlaid either on top of or behind each other, and the color palette features full control in either RGB, CMY or HSB modes. One of the most exciting features of Apex Media is the extent of cross imaging application of palettes. You can take a palette from a JPEG or TIFF file, for example, and apply it to true color animations very easily and quickly through the use of various matching options.

The manual translates the incredible number of functions in Apex Media fairly well, and includes tutorials. Late-breaking additions to the program include a full set of picture and animation viewers. Some are specifically Falcon-related, such as:

- [] A 256 color, 16-bit True Color FLIC Direct Disk Animation Viewer (supported formats include .FLI, .FLC, .FLH, .FLT, .FLX and AutoDesk)
- [] A DSP-based 24-bit Color JPEG Viewer
- [] Two GIF Viewers
- [] A Targa Viewer For Both Compressed and Uncompressed formats (4096 colors on the ST, 32768 colors on the STE, and 16.7 million colors 24-bit color! - on the Falcon)
- [] A CPX for translating images between the Targa, GIF & PPM formats, in either batch or single-mode as well as offering a number of options for tuning quality and filtering during conversion.

// // // // // // // // / NEON 3-D SUITE / // // // // // // //

Whereas Apex Media is a 2-D graphics and animation program, Neon brings the world of 3-D rendering, raytracing and animation to the Atari platform with a vengeance. Graphics image processing often requires a fast processor, a fair amount of RAM and a math co-processor (FPU). With this in mind, you really need to run Neon on a TT or a Falcon (preferably with a math-coprocessor installed in either machine) to get a hands-on idea of what makes this program so great!

Neon actually consists of two separate programs. One is where you perform all modeling operations and the other is for mapping out your animations. Each has a similar interface, with three windows -front/back, sides and top/bottom - which offer a preview of your work in either wireframe, shaded or full rendering mode.

A fourth window lets you view your work in 3-D, fully-rendered movements in real time, but is only available in resolutions which support 256 colors. Most of the time, you'll want to perform the majority of your basic work in wire-frame mode, since the redraws are instantaneous and it requires the least amount of processing time.

In the modeler you can create objects using automatic primitives, such as cubes, spheres, doughnut toruses and a number of other dimensional objects. There's even a "chess board" primitive which creates a 3-D plane. You can Stretch, Rotate, Move, Deform and Insert to combine objects or add additional new objects to the workplace, as well as add beveling to any object you designate.

Neon's Texture Mapping capabilities are quite stunning, and the program provides a preview window to view the finished result. You can apply this operation to either a flat surface or a sphere, and the program gives you a fine amount of control over such aspects as lighting and reflectivity.

There are a full compliment of on-board texture samples, including marble, turbulence, linear, random, fire, soft turbulence, wood with control on x, y and z axis with transparency, and filtered effects and control of light bending through the object when working with transparency effects. Neon supports importing Targa files for mapping them directly onto your shapes. A unique feature enables you to even deform the face of an object to create bump maps based on the on-board selection of texture maps.

The Animation application allows you to total 360 degree control Neon's animation camera, including lens size and perspective view. You can create and define multiple light sources, as well as choose colors in fine increments, apply them to parallel and spot light sources and select a choice of resulting shadow, complete with depth and fade parameters. What's amazing here is the depth of control over the most minute of atmospheric effects and conditions. Such aspects as Ambient lighting offers a range of controls from the subtle to the overt.

Time Spline offers free control of the animation tracking path, as well as movement, speed and placement of an object in animation relative to start and end positions. Animations can be viewed in real time. There's a sample animation of rippling water which has to be seen to be believed. If you've ever watched Star Trek: Deep Space Nine's Odo revert to liquid flowing form, then you'll have an idea of what's in store.

Both Neon and Apex Media require a good deal of persistence in exploring the incredible number of features and powerful graphics processing they both possess. They are also equally remarkable in the high level of control, complexity of achievable results and relative speed of operations which they afford the user. Despite their ability to run on an 030 with more than acceptable performance, they are crying out for an 040 accelerator, or better. All in good time...

Well, that's it for this edition. Next issue we'll have more of the latest in all your favorite subjects.

[illegible]

Page # 35

